## **Natality**

An Overview: 2007	
Total Resident Live Births	12,253
Crude Birth Rate per 1,000 Population	16.2
Median Live Birth Weight (Grams)	3,345
Low Weight Births (Less than 2,500 grams)	853
Low Birth Weight Rate per 1,000 Live Births	69.6
Mean Age of Mother	27
No Prenatal Care (Percentage of Total Single Live Births)	0.7%

Starting in 2006, the Department of Health, Office of Data, Statistics, and Vital Records implemented the 2003 U.S. Standard Certificate of Live Birth. Please note education, prenatal care, and tobacco use data are no longer comparable with data years before 2006. There were 12,253 births to South Dakota residents in 2007, for a crude birth rate of 16.2 per 1,000 South Dakota resident population.

Resident births increased by 2.8 percent from 2006 when there were 11,914 births. In 2007, 51.5 percent of the babies born were male and 48.5 percent were female. Racially, white births were 51.7 percent male and 48.3 percent female; American Indian births were 50.6 percent male, 49.4 percent female.

The low birth weight rate per 1,000 live births decreased from 70.3 in 2006 to 69.6 in 2007. This was a 1.0 percent decrease from the 2006 low birth weight rate.

Table 8, below and Figure 2, page 22, display the live births and crude birth rates for the United States and South Dakota for the past 20 years. As the illustrations indicate, South Dakota's birth rate remains above the national average.

Table 8
Resident Live Births and Crude Birth Rates, South Dakota and United States, 1988-2007

Year	Unite	d States	South Dakota			
1 cai	Number	Crude Rate	Number	Crude Rate		
2007	*4,315,000	*14.3	12,253	16.2		
2006	*4,265,996	*14.3	11,914	15.8		
2005	4,138,349	14.0	11,466	15.2		
2004	4,112,052	14.0	11,339	15.0		
2003	4,089,950	14.1	11,022	14.6		
2002	4,021,726	13.9	10,698	14.2		
2001	4,025,933	14.5	10,475	13.8		
2000	4,058,814	14.7	10,346	13.7		
1999	3,959,417	14.5	10,516	15.1		
1998	3,941,553	14.6	10,281	14.8		
1997	3,880,894	14.5	10,168	14.6		
1996	3,891,494	14.7	10,469	15.0		
1995	3,899,589	14.8	10,470	15.0		
1994	3,952,767	15.2	10,504	15.1		
1993	4,000,240	15.5	10,718	15.4		
1992	4,065,014	15.9	11,007	15.8		
1991	4,110,907	16.3	10,930	15.7		
1990	4,158,212	16.7	10,987	15.8		
1989	4,040,958	16.4	11,072	15.5		
1988	3,909,510	16.0	11,185	15.7		

Note: \*U.S. 2006 and 2007 data are provisional.

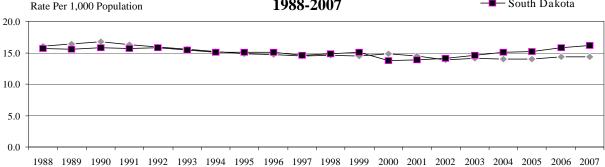
The decrease in the South Dakota crude rate in 2000 is at least partially due to the change in population from the 2000 census.

Crude birth rates are per 1,000 population.

Source: National Center for Health Statistics

## Figure 2 Resident Live Birth Rates, South Dakota and United States, 1988-2007





Note: 2006 and 2007 U.S. data are provisional.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

#### Births by Race

Table 9 shows the number and percent of resident births by mother's race since 1988. In 2007, the percentage of births to whites decreased by 0.8 percent, while the percentage of births for American Indians increased by 3.3 percent. The percentage of births to other races remained unchanged from 2006.

In 2003. the South Dakota Department of Health (SDDOH) began utilizing the multiple race data on the birth certificate for the mother and father. Therefore, in order to assign a single race to each mother, the SDDOH allocated multiple races into one single race. The methods used for this allocation can be found on page 229. Consequently, it should be noted that any changes illustrated in Table 9 beginning in 2003 in the racial breakdown of mothers should be interpreted with this reporting change in mind.

Table 10, on the next page, shows a more detailed racial breakdown since these changes were implemented in 2003. These specific racial groups were not all possible prior to 2003.

Table 9 South Dakota Resident Live Births by Mother's Race, 1988-2007

В	irths	Wh	ite	America	n Indian	Other		
Year	Number	Number	Percent	Number	Percent	Number	Percent	
2007	12,253	9,571	78.1	2,286	18.7	380	3.1	
2006	11,914	9,371	78.7	2,160	18.1	365	3.1	
2005	11,466	8,974	78.3	2,155	18.8	322	2.8	
2004	11,339	8,924	78.7	2,100	18.5	313	2.8	
2003	11,022	8,642	78.4	2,091	19.0	289	2.6	
2002	10,698	8,648	80.8	1,805	16.9	244	2.3	
2001	10,475	8,469	80.8	1,770	17.0	233	2.2	
2000	10,346	8,416	81.3	1,682	16.3	245	2.4	
1999	10,516	8,658	82.3	1,665	15.8	192	1.8	
1998	10,281	8,383	81.5	1,716	16.7	181	1.8	
1997	10,168	8,412	82.7	1,538	15.1	218	2.1	
1996	10,469	8,655	82.7	1,632	15.6	181	1.7	
1995	10,470	8,684	82.9	1,564	14.9	221	2.1	
1994	10,504	8,771	83.5	1,533	14.6	197	1.9	
1993	10,718	8,822	82.3	1,720	16.0	173	1.6	
1992	11,007	9,090	82.6	1,739	15.8	159	1.4	
1991	10,930	9,068	83.0	1,665	15.2	132	1.2	
1990	10,987	9,165	83.4	1,668	15.2	154	1.4	
1989	11,072	9,163	82.8	1,753	15.8	156	1.4	
1988	11,185	9,343	83.5	1,696	15.2	146	1.3	

Note: Failure of the races to add to the total is due to unknown races contained in the total

birth column.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

In 2007, 78.1 percent of South Dakota resident births were white, 18.7 percent were American Indian, 1.8 percent were black, and 1.2 percent were Asian.

Table 10 South Dakota Resident Live Births by Mother's Race, 2003-2007

В	Sirths	Wh	ite	American Indian		Black		Asian		Other	
Year	Number	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2007	12,253	9,571	78.1	2,286	18.7	219	1.8	148	1.2	13	0.1
2006	11,914	9,371	78.7	2,160	18.1	212	1.8	147	1.2	6	0.1
2005	11,466	8,974	78.3	2,155	18.8	153	1.3	116	1.0	42	0.4
2004	11,339	8,924	78.7	2,100	18.5	154	1.4	142	1.3	15	0.1
2003	11,022	8,642	78.4	2,091	19.0	131	1.2	134	1.2	15	0.1

Note: Failure of the races to add to the total is due to unknown races contained in the total birth column.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

#### Births by Ethnicity

Table 11 displays the number and percent of resident births ethnicity of mother since 1998. In 2007, the percentage of births to non-Hispanic mothers was percent, while the percentage of births to Hispanic mothers was 3.8 percent. Overall, the percent of Hispanic births has been increasing since 1998 with a percent increase of 153.3 percent, while the percent of non-Hispanic births has been decreasing since 1998 with a percent decrease of 2.5 percent.

Table 12, on the right, displays resident births by mother's ethnicity and race. Asian, white, and American Indian race groups had the highest percent of Hispanic mothers. However, the majority of all race groups were non-Hispanic with percents ranging from 97.7 to 84.6.

## Multiple Births

Table 13, on the right, displays resident multiple births for the last ten years. The highest number of twins happened in 2006 with 188 sets of twins born. The highest number of triplets happened in 2007 and 2002 both with seven sets of triplets born.

Table 11 South Dakota Resident Live Births by Ethnicity of Mother, 1998-2007

В	irths	Non-Hi	spanic	Hispanic		
Year	Number	Number	Percent	Number	Percent	
2007	12,253	11,761	96.0	471	3.8	
2006	11,914	11,504	96.6	398	3.3	
2005	11,466	11,070	96.5	392	3.4	
2004	11,339	10,936	96.4	395	3.5	
2003	11,022	10,682	96.9	340	3.1	
2002	10,698	10,380	97.0	317	3.0	
2001	10,475	10,211	97.5	257	2.5	
2000	10,346	10,109	97.7	225	2.2	
1999	10,516	10,331	98.2	178	1.7	
1998	10,281	10,126	98.5	154	1.5	

Note: Failure of ethnicity of mother to add to the total is due to unknown ethnicity contained in the total birth column.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 12 South Dakota Resident Live Births by Mother's Ethnicity and Race, 2007

Births	Non-H	ispanic	Hispanic		
Race	Number	Number	Percent	Number	Percent
Total	12,253	11,761	96.0	471	3.8
White	9,571	9,209	96.2	360	3.8
American Indian	2,286	2,186	95.6	84	3.7
Black	219	214	97.7	5	2.3
Asian	148	140	94.6	8	5.4
Other	13	11	84.6	2	15.4

Note: Failure of ethnicity to add to the total is due to unknown ethnicity contained in the total birth column.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 13
South Dakota Resident Multiple Live Births, 1998-2007

Year of Birth	Twins	Triplets	Quadruplets		
2007	173	7	0		
2006	188	2	0		
2005	143	3	1		
2004	182	5	0		
2003	153	1	0		
2002	159	7	0		
2001	166	4	0		
2000	118	6	1		
1999	138	5	0		
1998	143	3	1		

#### **Marital Status**

In 2007, the majority of women who gave birth, 61.4 percent, were married. Since 1998, the majority of women who gave birth were married.

Table 14 South Dakota Resident Births by Year of Birth and Marital Status, 1998-2007

	To	tal	Mar	ried	Sin	gle
Year	Number	Percent	Number	Percent	Number	Percent
2007	12,061	100	7,406	61.4	4,637	38.4
2006	11,722	100	7,339	62.6	4,374	37.3
2005	11,308	100	7,179	63.5	4,116	36.4
2004	11,143	100	7,213	64.7	3,922	35.2
2003	10,864	100	7,141	65.7	3,721	34.3
2002	10,521	100	6,829	64.9	3,692	35.1
2001	10,295	100	6,829	66.3	3,466	33.7
2000	10,204	100	6,780	66.4	3,424	33.6
1999	10,365	100	7,057	68.1	3,308	31.9
1998	10,122	100	6,867	67.8	3,255	32.2

Note: For purposes of reporting martial status of the mother, multiple births(twins, triplets, etc.) Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

# South Dakota Resident and Occurrence Births

Table 15 shows that of the 12,253 South Dakota resident births in 2007, 9,571 were to white women while 2,286 were to American Indian women. Of the 12,253 births, 406 occurred out of state. The four states where the majority of these births occurred are bordering states. The percent of births occurring in each are as follows:

- Iowa-1.2 Percent
- Minnesota-0.5 percent
- Nebraska-0.4 percent
- North Dakota-1.1 percent

In comparison, Table 16 shows 967 of the 12,814 births occurring in South Dakota during 2007 were to non-residents of South Dakota. Of the 12,814 live births occurring in South Dakota 10,156 were to white women while 2,254 were to American Indian women.

#### **Attendant During Birth**

South Dakota physicians and certified nurse midwives attended 92.1 percent and 7.1 percent of the births respectively. In 2007, home births represented 0.2 percent of South Dakota resident live births. From 2006 to 2007 home births remained unchanged with 0.2 percent of South Dakota resident live births.

Table 15 South Dakota Resident Live Births by State in Which Birth Occurred and Mother's Race, 2007

		R	ace of Moth	er
	Total	White	American Indian	Other
Total	12,253	9,571	2,286	380
South Dakota	11,847	9,277	2,181	374
Iowa	141	136	1	4
Minnesota	56	54	2	0
Nebraska	46	23	23	0
North Dakota All Other	140 23	61 20	79 0	0 2

Note: Failure of the races to add to the total is due to unknown races

contained in the total birth column.

Source: South Dakota Department of Health, Office of Data, Statistics,

and Vital Records

Table 16 Live Births Occurring in South Dakota by Mother's Resident State and Race, 2007

		Ra	Race of Mother						
	Total	White	American Indian	Other					
Total	12,814	10,156	2,254	389					
South Dakota	11,847	9,277	2,181	374					
Minnesota	294	272	16	6					
Iowa	286	284	0	2					
Nebraska	182	140	41	1					
Wyoming	118	114	1	3					
North Dakota	62	54	7	1					
All Other	25	15	8	2					

Note: Failure of the races to add to the total is due to unknown

races contained in the total birth column

Source: South Dakota Department of Health, Office of Data,

Statistics, and Vital Records.

#### Birth Weight

Table 17, below, indicates that in 2007 the majority of births fell into the 3,000 to 3,499 gram range. This is consistent with data from the past several years. There were 853 low weight births or 7 percent of all South Dakota resident live births in 2007.

When looking at race, 6.6 percent of white babies and 7.8 percent of American Indian babies were low birth weight in 2007. In comparison, in 2006 white and American Indian low birth weight births were 6.8 and 7.7 percent, respectively.

Table 17

South Dakota Resident Live Births by Birth Weight and Mother's Race, 2007

Birth Weight					Race of	Mother		
(in Grams)	Tot	tal	W	hite	America	n Indian	Other	
	Number	Percent	ercent Number Percent Number Percent		Number	Percent		
0-499	20	0.2	14	0.1	5	0.2	1	0.3
500-999	32	0.3	23	0.2	8	0.3	1	0.3
1,000-1,499	62	0.5	44	0.5	14	0.6	4	1.1
1,500-1,999	189	1.5	140	1.5	40	1.7	9	2.4
2,000-2,499	550	4.5	415	4.3	112	4.9	22	5.8
2,500-2,999	1,996	16.3	1,586	16.6	323	14.1	86	22.6
3,000-3,499	4,840	39.5	3,822	39.9	858	37.5	154	40.5
3,500-3,999	3,501	28.6	2,743	28.7	669	29.3	85	22.4
4,000-4,499	919	7.5	690	7.2	213	9.3	15	3.9
4,500-4,999	128	1.0	88	0.9	37	1.6	1	0.3
5,000 & Over	11	0.1	5	0.1	5	0.2	1	0.3
Total	12,253	100.0	9,571	100.0	2,286	100.0	380	100.0
Median birth weight in grams	3345		3345		3402		3175	
Mean birth weight in grams	3313		3311		3347		3155	
Modal birth weight in grams	3289		3289		3317		3005	

Note: Failure of the races and birth weights to add to the total is due to unknown races and birth weights in the total birth column and row. Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 18, below, shows a more detailed racial breakdown by birth weight from 2003 to 2007. For all races, the majority of births fell into the 3,000 to 3,499 category.

From 2003 to 2007, there were 3,970 low weight births or 6.8 percent of all South Dakota resident live births.

Table 18 South Dakota Resident Live Births by Birth Weight and Mother's Race, 2003-2007

Birth Weight		Race of Mother											
(in Grams)	Total		White		America	<b>American Indian</b>		Black		Asian		Other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
0-499	80	0.1	55	0.1	22	0.2	2	0.2	0	0.0	1	0.8	
500-999	223	0.4	157	0.3	56	0.5	6	0.7	4	0.6	0	0.0	
1,000-1,499	338	0.6	234	0.5	89	0.8	10	1.2	5	0.7	0	0.0	
1,500-1,999	770	1.3	593	1.3	150	1.4	13	1.5	8	1.2	6	4.6	
2,000-2,499	2,559	4.4	1,980	4.4	485	4.5	42	4.8	40	6.0	9	6.9	
2,500-2,999	9,307	16.0	7,318	16.1	1,612	14.9	206	23.7	145	21.6	19	14.6	
3,000-3,499	22,151	38.2	17,519	38.5	3,921	36.3	353	40.6	286	42.7	52	40.0	
3,500-3,999	17,098	29.5	13,523	29.7	3,191	29.6	189	21.7	145	21.6	36	27.7	
4,000-4,499	4,698	8.1	3,600	7.9	1,021	9.5	39	4.5	33	4.9	3	2.3	
4,500-4,999	686	1.2	465	1.0	207	1.9	7	0.8	4	0.6	1	0.8	
5,000 & Over	59	0.1	33	0.1	23	0.2	2	0.2	0	0.0	1	0.8	
Total	57,994	100.0	45,482	100.0	10,792	100.0	869	100.0	670	100.0	75	100.0	
Median birth weight in grams	3374		3374		3402		3204		3204		3289		
Mean birth weight in grams	3328		3328		3352		3182		3190		3200		
Modal birth weight in grams	3289		3289		3317		3175		3119		3119		

Note: Failure of the races and birth weights to add to the total is due to unknown races and birth weights contained in the total birth column and row.

Table 19, below, shows resident births by birth weight and mother's ethnicity. The majority of births for both non-Hispanic and Hispanic mothers fell into the 3,000 to 3,499 grams category.

When looking at ethnicity, 7.0 percent of non-Hispanic babies and 6.6 percent of Hispanic babies were low birth weight in 2007.

Table 19
South Dakota Resident Live Births by Birth Weight and Mother's Ethnicity, 2007

Birth Weight				Ethnicity	of Mothe	r
(in Grams)	To	tal	Non-H	ispanic	Hisp	anic
	Number	Percent	Number	Percent	Number	Percent
0-1,999	303	2.5	287	2.4	15	3.2
2,000-2,499	550	4.5	534	4.5	16	3.4
2,500-2,999	1,996	16.3	1,909	16.2	83	17.6
3,000-3,499	4,840	39.5	4,634	39.4	198	42.0
3,500-3,999	3,501	28.6	3,373	28.7	123	26.1
4,000-4,499	919	7.5	890	7.6	28	5.9
4,500-4,999	128	1.0	121	1.0	6	1.3
5,000 & Over	11	0.1	9	0.1	2	0.4
Total	12,253	100.0	11,761	100.0	471	100.0
Median birth weight in grams	3345		3345		3289	
Mean birth weight in grams	3313		3314		3280	
Mode birth weight in grams	3289		3402		3289	

Note: Failure of the ethnicity and birth weights to add to the total is due to unknown ethnicity and

birth weights contained in the total birth column and row.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

In 2007, 72.6 percent of low birth weight infants in South Dakota were born preterm. Preterm birth is among the leading causes of infant death<sup>1</sup>.

Table 20, below, displays preterm and full term low birth weight births to South Dakota residents by mother's age.

Table 20 South Dakota Resident Preterm and Full Term Births Less Than 2,500 Grams by Mother's Age, 2007

		Weeks of Gestation											
	Tot	tal	Less than	32 Weeks	32 to 36	Weeks	37 and	Above					
Mother's Age	Number Percent		Number	Percent	Number	Percent	Number	Percent					
< 18 Years	35	100.0	12	34.3	18	51.4	5	14.3					
18-19 Years	63	100.0	12	19.0	28	44.4	23	36.5					
20-24 Years	221	100.0	28	12.7	131	59.3	61	27.6					
25-29 Years	286	100.0	50	17.5	161	56.3	72	25.2					
30-34 Years	156	100.0	18	11.5	93	59.6	43	27.6					
35 + Years	92	100.0	16	17.4	52	56.5	24	26.1					
Total	853	100.0	136	15.9	483	56.6	228	26.7					

Note: Failure to add up to 853 because of 6 unknown gestations.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 21, on the next page, displays preterm and full term low birth weight births to South Dakota residents by mother's race. From 2003 to 2007, 70 percent of low birth weight infants in South Dakota were born preterm.

When looking at race, 72.2 percent of

American Indian low birth weight infants were born preterm from 2003 to 2007. That was followed by 69.9 percent of white low birth weight infants, 60.3 percent of Black low birth weight infants, and 59.6 percent of Asian low birth weight infants who were born preterm from 2003 to 2007.

Table 21 South Dakota Resident Preterm and Full Term Births Less Than 2,500 Grams by Mother's Race, 2003-2007

		Weeks of Gestation											
Mother's	To	tal	Less than	32 Weeks	32 to 36	Weeks	37 and	Above					
Race	Number	Percent	Number	Percent	Number	Percent	Number	Percent					
White	3,019	100.0	490	16.2	1,619	53.6	899	29.8					
American Indian	802	100.0	178	22.2	401	50.0	220	27.4					
Black	73	100.0	18	24.7	26	35.6	26	35.6					
Asian	57	100.0	8	14.0	26	45.6	23	40.4					
Other	16	100.0	1	6.3	11	68.8	4	25.0					
Total	3,970	100.0	695	17.5	2,084	52.5	1,174	29.6					

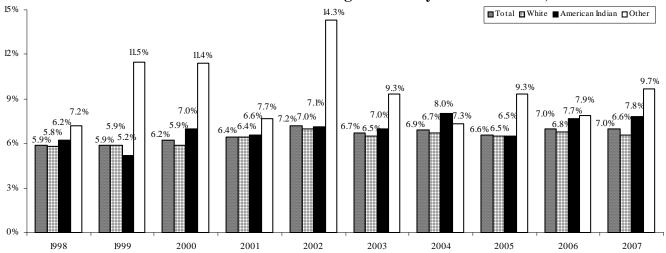
Note: Failure to add up to 3,970 because of 17 unknown gestation.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Figure 3, below, compares the low birth weight babies by race of mother from 1998 to 2007. In 2007, white women accounted for 636 or 6.6 percent of low birth weight babies. American Indian women accounted for 179 or 7.8 percent of low birth weight

babies. In 2007, there was a 2.9 percent decrease in white low birth weight babies while among American Indians there was a 1.3 percent increase in low birth weight babies.

Figure 3
South Dakota Resident Low Birth Weight Births by Race of Mother, 1998-2007

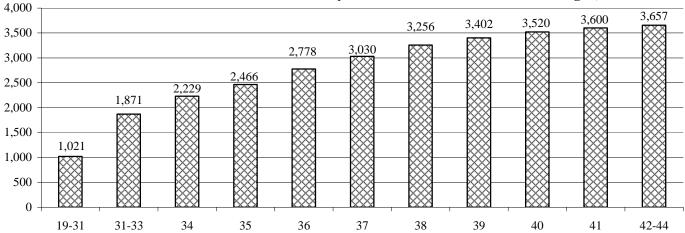


Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Figure 4, on the next page, shows live births by weeks of gestation and median birth weight.

Overall, the longer the weeks of gestation the higher the median birth weight gets.

Figure 4
South Dakota Resident Live Births by Gestation and Median Birth Weight, 2007



Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 22, below, displays resident births by year of birth and weeks of gestation. In 2007, the majority of births, 56.4 percent, occurred between 37 to 39 weeks of gestation. This is consistent with the

past several years. However, in the late 1990s the majority of births occurred at 40 weeks of gestation or over with 48.5 percent in 1999 and 52 percent in 1998.

Table 22 South Dakota Resident Births by Year of Birth and Weeks of Gestation, 1998-2007

	To	tal	<3	B5	35-	36	37-	39	40	)+
Year	Number	Percent								
2007	11,850	100	318	2.7	600	5.1	6,681	56.4	4,251	35.9
2006	11,505	100	317	2.8	575	5.0	6,584	57.2	4,029	35.0
2005	11,107	100	271	2.4	535	4.8	6,128	55.2	4,173	37.6
2004	10,932	100	293	2.7	536	4.9	5,876	53.8	4,227	38.7
2003	10,707	100	245	2.3	513	4.8	5,636	52.6	4,313	40.3
2002	10,348	100	257	2.5	464	4.5	5,332	51.5	4,295	41.5
2001	10,116	100	246	2.4	419	4.1	5,009	49.5	4,442	43.9
2000	10,071	100	252	2.5	458	4.5	4,852	48.2	4,509	44.8
1999	10,218	100	212	2.1	406	4.0	4,644	45.4	4,956	48.5
1998	9,966	100	236	2.4	350	3.5	4,200	42.1	5,180	52.0

Note: Table does not include multiple pregnancies

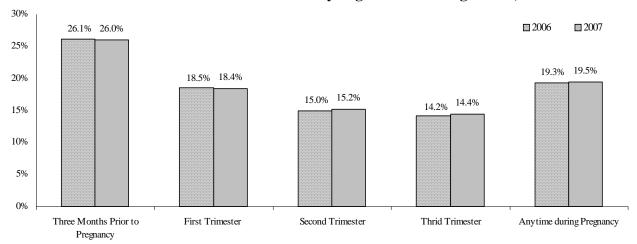
Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

### Tobacco Use

Figure 5, on the next page, illustrates the percent of mothers who smoked in 2007 and 2006. The highest percentage of mothers stated they smoked three months prior to

pregnancy in both 2007 and 2006. In 2007 14.4 percent and in 2006 14.2 percent stated they still smoked during the third trimester.

Figure 5
South Dakota Resident Live Births by Cigarette Smoking Status, 2006-2007

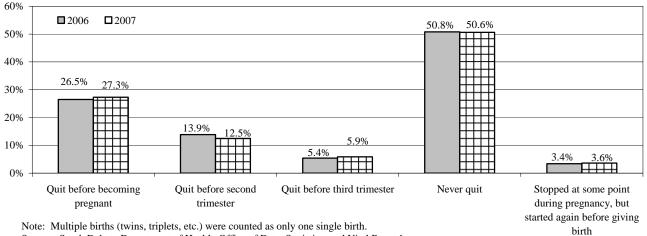


Note: For purposes of reporting cigarette smoking status during this pregnancy, multiple births (twins, triplets, etc.) are counted only as a single birth. Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Figure 6, below, illustrates the percent of mothers who smoked prior to pregnancy by their smoking status during pregnancy.

The majority in both 2006 and 2007 stated they never quit during their pregnancies at 50.8 and 50.6 percent, respectively.

Figure 6
South Dakota Resident Births to Mothers Who Smoked Prior to Pregnancy by Smoking
Status During Pregnancy, 2006-2007



## Mother's Age and Race

Table 23, on the next page, displays that women aged 25 to 29 account for the largest percentage of South Dakota resident births in 2007, at 33.4 percent. Women less than 20 years of age comprised 9.8 percent of the total resident births.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

The median ages for white, American Indian, black, and Asian mothers were 27, 23, 26, 29 years of age, respectively. The modal ages for the same race groups were 27, 19, 28, 31 years of age respectively.

Table 23
South Dakota Resident Live Births by Mother's Age and Race, 2007

Age of							Race of	Mother				
Mother	To	tal	Wł	nite	America	n Indian	Black		Asi	ian	Other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than 18	343	2.8	164	1.7	172	7.5	3	1.4	2	1.4	0	0.0
18-19 Years	855	7.0	475	5.0	357	15.6	15	6.8	6	4.1	1	7.7
20-24 Years	3,306	27.0	2,339	24.4	864	37.8	74	33.8	25	16.9	3	23.1
25-29 Years	4,091	33.4	3,436	35.9	528	23.1	67	30.6	49	33.1	6	46.2
30-34 Years	2,493	20.3	2,165	22.6	231	10.1	44	20.1	45	30.4	2	15.4
35-39 Years	995	8.1	850	8.9	111	4.9	16	7.3	17	11.5	0	0.0
40 & over	169	1.4	142	1.5	23	1.0	0	0.0	4	2.7	0	0.0
Total	12,253	100.0	9,571	100.0	2,286	100.0	219	100.0	148	100.0	13	100.0

Note: Failure of age and races to add to the total is due to unknown ages and races contained in the total and other birth column and row.

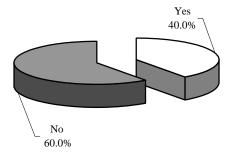
Failure of births to add to the total is due to unknown age.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 24, right, displays resident births by mother's age and ethnicity. Non-Hispanic women less than 20 years of age accounted for 9.4 percent of total non-Hispanic births, while Hispanic women less than 20 accounted for 18.1 percent of total Hispanic births. Non-Hispanic women aged 25 to 29 accounted for the largest percentage of total non-Hispanic births at 33.8 percent, while Hispanic women aged 20 to 24 accounted for the largest percentage of total Hispanic births at 34.2 percent.

Figure 7, below, displays the percent of South Dakota resident live births by WIC Status. Almost half, 40 percent, of births are on WIC.

Figure 7 South Dakota Resident Live Births by WIC Status, 2007



Note: For purposes of reporting WIC status, multiple births (twins, triplets, etc.) are counted only as a single birth.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 24 South Dakota Resident Live Births by Mother's Age and Ethnicity, 2007

Age of				Ethnicity	of Mothe	r	
Mother	To	tal	Non-H	ispanic	Hispanic		
	Number	Percent	Number	Percent	Number	Percent	
Less than 18	343	2.8	311	2.6	30	6.4	
18-19 Years	855	7.0	796	6.8	55	11.7	
20-24 Years	3,306	27.0	3,142	26.7	161	34.2	
25-29 Years	4,091	33.4	3,974	33.8	113	24.0	
30-34 Years	2,493	20.3	2,414	20.5	73	15.5	
35-39 Years	995	8.1	955	8.1	38	8.1	
40 & over	169 1.4		168	1.4	1	0.2	
Total	12,253	100.0	11,761	100.0	471	100.0	

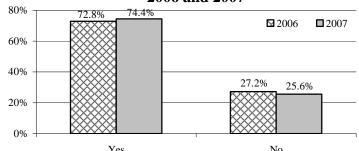
Note: Failure of the age and ethnicity to add to the total is due to unknown ages and ethnicity contained in the total birth and non-Hispanic column and row.

Failure of births to add to the total is due to unknown age.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Figure 8, below, displays breastfeeding status at time of discharge in 2006 and 2007. The percent of women who stated they were breastfeeding at time of discharge from the hospital increased from 72.8 percent in 2006 to 74.4 percent in 2007.

Figure 8
South Dakota Resident Live Births by
Breastfeeding Status at Time of Discharge,
2006 and 2007



Note: For purposes of reporting breastfeeding status at time of discharge, multiple births (twins, triplets, etc.) are counted only as a single birth.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 25, below, displays South Dakota resident teen births (15 to 17 years old) by race from 2000 through 2007. In 2007, the teen birth rate was 18.0.

When race is taken into account, the white teen birth rate was 10.3 compared to a teen birth rate of 66.4 for American Indians in 2007

Table 25
South Dakota Resident Teen Births and Rates by Year and Mother's Race, 2000-2007

	Tota	ıl	Whit	te	American	Indian	Othe	er
Year	Number	Rate	Number	Rate	Number	Rate	Number	Rate
2007	330	18.0	159	10.3	164	66.4	5	17.4
2006	315	17.2	149	9.7	159	64.3	7	24.4
2005	336	18.3	157	10.2	174	70.4	5	17.4
2004	297	16.2	141	9.1	146	59.1	10	34.8
2003	303	16.5	129	8.4	165	66.8	9	31.4
2002	304	16.6	159	10.3	139	56.3	6	20.9
2001	336	18.3	176	11.4	152	61.5	8	27.9
2000	354	19.3	189	12.2	157	63.5	8	27.9

Note: Rates are per 1,000 female population ages 15-17.

Rates are based on the 2000 census.

For purposes of reporting birth rates, multiple births (twins, triplets, etc.) are counted only as a single birth.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records.

#### Prenatal Care

Table 26, below, shows the number and percentage of South Dakota resident single live births and when the mothers started prenatal care in 2007. Almost 70 percent of mothers initiated care in the first trimester -75 percent of white mothers, 50.4 percent of American Indian mothers, 44.7 percent of black mothers, and 65.5 percent of Asian

mothers. Less than one percent did not obtain prenatal care at all - 0.3 percent of white mothers, 2.4 percent of American Indian mothers, 0.5 percent black mothers and 0.7 percent Asian mothers. Due to a change in reporting, data in this table are not comparable to data prior to 2006.

Table 26 South Dakota Resident Live Births by Trimester Prenatal Care Began and Mother's Race, 2007

Trimester Prenatal				Race of Mother											
Care Began	To	tal	Wh	iite	America	n Indian	Black		Asi	an	Other				
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent			
First	8,405	69.7	7,060	75.0	1,135	50.4	96	44.7	97	65.5	10	83.3			
Second	2,806	23.3	1,889	20.1	776	34.5	97	45.1	36	24.3	2	16.7			
Third	597	4.9	321	3.4	243	10.8	20	9.3	11	7.4	0	0.0			
None	89	0.7	31	0.3	55	2.4	1	0.5	1	0.7	0	0.0			
Unknown	164	1.4	117	1.2	43	1.9	1	0.5	3	2.0	0	0.0			
Total	12,061	100.0	9,418	100.0	2,252	100.0	215	100.0	148	100.0	12	100.0			

Note: Failure of the races to add to the total is due to the unknown races contained in the total birth column.

For purposes of reporting prenatal care, multiple births (twins, triplets, etc.) are counted only as a single birth.

Table 27, below, displays when mothers began prenatal care by the ethnicity of the mother. The majority of non-Hispanic mothers, 70.5 percent, and Hispanic

mothers, 51.4 percent, began prenatal care in their first trimester. Less than one percent of non-Hispanic and one percent of Hispanic mothers did not obtain prenatal care at all.

Table 27 South Dakota Resident Live Births by Trimester Prenatal Care Began and Mother's Ethnicity, 2007

Trimester			]	Ethnicity	of Mother	•
Prenatal Care Began	То	tal	Non-H	ispanic	Hisp	anic
	Number Percent		Number	Percent	Number	Percent
First	8,405	69.7	8,154	70.5	240	51.4
Second	2,806	23.3	2,636	22.8	166	35.5
Third	597	4.9	543	4.7	51	10.9
None	89	0.7	82	0.7	4	0.9
Unknown	164	1.4	158	1.4	6	1.3
Total	12,061	100.0	11,573	100.0	467	100.0

Note: Failure of the ethnicities to add to the total is due to the unknown ethnicities contained in the total birth column. For purposes of reporting prenatal care, multiple births (twins, triplets, etc.) are counted only as a single birth.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 28, below, indicates that 22.8 percent of pregnancies resulting in low birth weight babies (less than 2,500 grams) had fewer than five prenatal care visits; 37.7 percent

of American Indian and 18.6 percent of the white low birth weight babies were born to mothers with fewer than five prenatal care visits.

Table 28
South Dakota Resident Live Births by Number of Prenatal Visits and Mother's Race for Low Birth Weight Babies, 2007

Number of					Race of Mother					
Prenatal Care Visits	Tota	al	Wh	ite	Americai	ı Indian	Otl	ner		
	Number 1	Percent	Number	Percent	Number	Percent	Number	Percent		
None	17	2.3	8	1.5	7	4.4	1	3.0		
1-4	150	20.5	92	17.1	53	33.3	5	15.2		
5-9	322	44.0	238	44.2	68	42.8	16	48.5		
10-14	190	26.0	161	29.9	19	11.9	10	30.3		
15-19	35	4.8	28	5.2	6	3.8	1	3.0		
20+	6	0.8	6	1.1	0	0.0	0	0.0		
Not Stated	11	1.5	5	0.9	6	3.8	0	0.0		
Total	731	100.0	538	100.0	159	100.0	33	100.0		

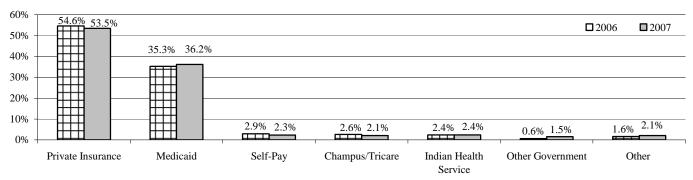
Note: For purposes of calculating prenatal care, multiple births (twins, triplets, etc.) are counted only as a single birth. Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

#### Payment Type

Figure 9, on the next page, illustrates the percent of births by payment type. In 2007 the majority of births, 53.5 percent, were

paid by private insurance. The second highest payment type was Medicaid with 36.2 percent.

Figure 9
South Dakota Resident Live Births by Payment Type, 2006 and 2007



Note: For purposes of reporting payment type, multiple births (twins, triplets, etc.) are counted only as a single birth.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

#### Infections Present and/or Treated

Table 29, below, displays resident births by infections present and/or treated during mother's pregnancy by race. American Indian mothers had the highest percent of infections present and/or treated during pregnancy with 7.7 percent. Black mothers

had the second highest percent of infections present and/or treated during pregnancy with 7.4 percent. Asian mothers had 2.7 percent followed closely by white mothers with 1.7 percent of infections present and/or treated during pregnancy.

Table 29
South Dakota Resident Live Births by Infections
Present and/or Treated During This Pregnancy by Mother's Race, 2007

							Race of	Mother				
	Tot	al	Wh	ite	Amei Ind		Bla	ıck	Asi	an	Oth	ner
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Chlamydia	215	1.8	67	0.7	138	6.2	6	2.8	3	2.0	0	0.0
Genital herpes*	105	0.9	78	0.8	26	1.2	0	0.0	1	0.7	0	0.0
Gonorrhea	23	0.2	3	0.0	18	0.8	2	0.9	0	0.0	0	0.0
Hepatitis B	16	0.1	6	0.1	3	0.1	7	3.3	0	0.0	0	0.0
Hepatitis C	12	0.1	7	0.1	4	0.2	0	0.0	0	0.0	1	8.3
Toxoplasmosis	4	0.0	4	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Syphilis	2	0.0	0	0.0	0	0.0	2	0.9	0	0.0	0	0.0
Cytomegolovirus (CMV)	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rubella	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
No infections	11,626	97.0	9,188	98.3	2,069	92.3	199	92.6	144	97.3	11	91.7

Note: For purposes of reporting infections present and/or treated during this pregnancy, multiple births (twins, triplets, etc.) are counted only as a single birth.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

#### **Medical History Factors**

Table 30, on the next page, lists the medical history factors for South Dakota resident mothers for 2007. Black mothers had the highest percent with 29.8 percent, followed by the American Indian mothers with 26.4

percent. White mothers and Asian mothers had 25.6 and 20.3 percent of medical history factors associated with pregnancies, respectively.

<sup>\*</sup> According to the National Center for Health Statistics, genital herpes is comparable with past years.

Table 30 South Dakota Resident Live Births by Mother's Medical History Factors for this Pregnancy by Mother's Race, 2007

						]	Race of 1	Mother	Í			
	Tot	tal	Wh	ite	Amer Ind		Bla	ck	Asi	an	Oth	ier
	Num	<b>%</b>	Num	<b>%</b>	Num	<b>%</b>	Num	<b>%</b>	Num	<b>%</b>	Num	<b>%</b>
Mother had a previous cesarean delivery	1,470	12.3	1,147	12.3	277	12.3	32	14.9	12	8.1	1	8.3
Hypertension, gestational	552	4.6	467	5.0	72	3.2	9	4.2	4	2.7	0	0.0
Previous preterm births	521	4.3	364	3.9	144	6.4	11	5.1	2	1.4	0	0.0
Diabetes, gestational	511	4.3	373	4.0	123	5.5	8	3.7	7	4.7	0	0.0
Other previous poor pregnancy outcomes	291	2.4	192	2.1	87	3.9	7	3.3	5	3.4	0	0.0
Hypertension, pre-pregnancy*	120	1.0	92	1.0	23	1.0	4	1.9	1	0.7	0	0.0
Diabetes, pre-existing	84	0.7	57	0.6	25	1.1	0	0.0	1	0.7	1	8.3
Fertility-enhancing drugs, artificial insemination or intrauterine insemination	66	0.6	63	0.7	1	0.0	0	0.0	1	0.7	1	8.3
Hypertension, eclampsia	41	0.3	30	0.3	10	0.4	0	0.0	1	0.7	0	0.0
Hypertension, unknown type	25	0.2	18	0.2	7	0.3	0	0.0	0	0.0	0	0.0
Assisted reproductive technology	23	0.2	22	0.2	1	0.0	0	0.0	0	0.0	0	0.0
Family history of hearing loss	10	0.1	10	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Fertility treatment, unspecified	9	0.1	9	0.1	0	0.0	0	0.0	0	0.0	0	0.0
No medical risk factors for this pregnancy	8,905	74.3	6,959	74.4	1,652	73.6	151	70.2	118	79.7	10	83.3

Note: For purposes of reporting medical history factors of the mother, multiple births (twins, triplets, etc.) are counted only as a single birth.

\* According to the National Center for Health Statistics, hypertension, pre-pregnancy is comparable with past years.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

#### Apgar Score

The Apgar score was developed by the late Virginia Apgar, M.D., as a standardized mechanism to assess the physical condition of newborns. The score considers five easily identifiable characteristics – heart rate, respiratory effort, muscle tone, reflex, and color.

Each characteristic is assessed and assigned a value from zero to two, with two being optimum. If the total score of these five components is seven or greater, a newborn is considered to be in good to excellent physical condition<sup>1</sup>.

In 2007, 2.5 percent of South Dakota resident infants received five minute Apgar scores less than seven.

Considering race, 2.6 percent of white infants and 1.8 percent of American Indian infants received a five-minute Appar score less than seven in 2007.

#### Characteristics of Labor and Delivery

Table 31, on the next page, lists the characteristics of labor and delivery in 2007 reported on South Dakota resident birth certificates. The four most prevalent characteristics in 2007 were epidural or spinal anesthesia with 59.4 percent, induction of labor with 32.3 percent, augmentation of labor with 25.0 percent and antibiotics during labor with 19.9 percent. Overall characteristics of labor and delivery were present in 79 percent of resident births in 2007.

Table 28
South Dakota Resident Live Births by
Characteristics of Labor and Delivery by Mother's Race, 2007

			Race of Mother									
	Tot	Total		White		American Indian		ck	Asian		Oth	ıer
	Num	<b>%</b>	Num	<b>%</b>	Num	%	Num	<b>%</b>	Num	%	Num	<b>%</b>
Epidural or spinal anesthesia	7,143	59.4	6,055	64.6	883	39.2	105	48.8	82	55.4	10	83.3
Induction of labor*	3,888	32.3	3,307	35.3	495	22.0	46	21.4	34	23.0	5	41.7
Augmentation of labor	3,004	25.0	2,356	25.1	530	23.6	61	28.4	49	33.1	6	50.0
Antibiotics during labor	2,390	19.9	1,913	20.4	402	17.9	42	19.5	30	20.3	1	8.3
Meconium staining of the amniotic fluid	822	6.8	564	6.0	226	10.0	21	9.8	9	6.1	1	8.3
Fetal intolerance	783	6.5	619	6.6	141	6.3	10	4.7	13	8.8	0	0.0
Steroids (glucocorticoids) for fetal lung maturation received by the mother prior to delivery	171	1.4	127	1.4	41	1.8	2	0.9	1	0.7	0	0.0
Non-vertex presentation	174	1.4	133	1.4	40	1.8	0	0.0	1	0.7	0	0.0
Chorioamnioitis diagnosed during labor	60	0.5	38	0.4	19	0.8	0	0.0	2	1.4	1	8.3
None of the above	2,528	21.0	1,705	18.2	724	32.2	55	25.6	36	24.3	0	0.0

Note: For purposes of reporting characteristics of labor and delivery, multiple births (twins, triplets, etc.) are counted only as a single birth.

\* According to the National Center for Health Statistics, induction or labor is comparable with past years.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

#### **Obstetric Procedures**

Table 32, below, shows obstetric procedures by race for 2007. Tocolysis was the top obstetric procedure used for all races. Asian mothers had the highest percent of tocolysis with 2.7 percent followed closely by American Indians with 2.5 percent. White and black mothers had 2.1 and 1.9 percent of tocolysis, respectively.

Table 32 South Dakota Resident Live Births by Obstetric Procedures by Mother's Race, 2007

				Race of Mother									
	Tot	Total		White		American Indian		Black		Asian		ner	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	
Tocolysis*	256	2.1	192	2.1	56	2.5	4	1.9	4	2.7	0	0.0	
Cervical cerclage	42	0.4	34	0.4	7	0.3	0	0.0	1	0.7	0	0.0	
External cephalic version-failed	41	0.3	30	0.3	11	0.5	0	0.0	0	0.0	0	0.0	
External cephalic version-successful	25	0.2	20	0.2	4	0.2	0	0.0	1	0.7	0	0.0	
No obstetric procedures	11,643	97.1	9,087	97.2	2,174	96.6	211	98.1	143	96.6	12	100.0	

Note: For purposes of reporting obstetric procedures of the mother, multiple births (twins, triplets, etc.) are counted only as a single birth.

\* According to the National Center for Health Statistics, tocolysis is comparable with past years.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

#### Onset of Labor

Table 33, on the next page, displays the complications associated with the onset of labor by mother's race. The highest complication associated with onset of labor for whites and American Indians was

precipitous labor with 5.1 and 5.7 percent, respectively. In 2007, 12.2 percent of births had a complication associated with the onset of labor.

Table 33
South Dakota Resident Live Births by Onset of Labor by Mother's Race, 2007

				Race of Mother										
	Tot	Total		White		American Indian		Black		Asian		ner		
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%		
Precipitous labor (< 3 hours)*	632	5.3	473	5.1	128	5.7	20	9.3	10	6.8	0	0.0		
Premature rupture of membranes	571	4.8	444	4.7	111	4.9	6	2.8	10	6.8	0	0.0		
Prolonged labor (20 + hours)	331	2.8	255	2.7	64	2.8	5	2.3	5	3.4	2	16.7		
None of the above	10,534	87.8	8,238	88.1	1,961	87.1	186	86.5	124	83.8	10	83.3		

Note: For purposes of reporting onset of labor, multiple births (twins, triplets, etc.) are counted only as a single birth.

\* According to the National Center for Health Statistics, precipitous labor is comparable with past years.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

#### **Maternal Complications**

Table 34, below, illustrates the maternal complications by mother's race in 2007. The highest maternal complication in 2007 was third or fourth degree perineal laceration with 2.0 percent of births. Likewise, the highest maternal complication

for white, American Indian, black, and Asian mothers was third or fourth degree perineal laceration. Overall, maternal complications were present in 2.8 percent of resident births in 2007.

Methods of Delivery

Table 34
South Dakota Resident Live Births by Maternal Complications by Mother's Race, 2007

				Race of Mother										
	Tot	al	WI	White		American Indian		Black		ian	Other			
	Num	<b>%</b>	Num	%	Num	<b>%</b>	Num	%	Num	%	Num	%		
Third or fourth degree perineal laceration	243	2.0	197	2.1	37	1.6	3	1.4	6	4.1	0	0.0		
Maternal transfusion	52	0.4	31	0.3	20	0.9	1	0.5	0	0.0	0	0.0		
Unplanned operating procedure following delivery	47	0.4	28	0.3	19	0.8	0	0.0	0	0.0	0	0.0		
Admitted to intensive care	14	0.1	9	0.1	4	0.2	0	0.0	0	0.0	0	0.0		
Unplanned hysterectomy	5	0.0	5	0.1	0	0.0	0	0.0	0	0.0	0	0.0		
Ruptured uterus	4	0.0	1	0.0	3	0.1	0	0.0	0	0.0	0	0.0		
None of the above	11,658	97.2	9,098	97.3	2,180	96.8	211	98.1	142	95.9	12	100.0		

Note: For purposes of reporting obstetric procedures of the mother, multiple births (twins, triplets, etc.) are counted only as a single birth.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 35, on the next page, displays the method of delivery by mother's race from 2007. Vaginal birth was the largest method of delivery for all races. Primary C-section

was the second largest method of delivery for all races followed by repeat C-section methods. Table 35 South Dakota Resident Live Births by Method of Delivery by Mother's Race, 2007

						I	Race of I	Mother				
	Tot	Total		White		American Indian		ck	Asian		Other	
	Num	<b>%</b>	Num	%	Num	<b>%</b>	Num	%	Num	<b>%</b>	Num	%
Vaginal (Total)*	8,937	74.1	6,918	73.5	1,731	76.9	154	71.6	113	76.4	8	66.6
Vaginal with no previous C-section	8,689	72.0	6,732	71.5	1,678	74.5	148	68.8	110	74.3	8	66.7
Vaginal after previous C-section	210	1.7	155	1.6	46	2.0	6	2.8	3	2.0	0	0.0
Vaginal (unknown previous types)	38	0.3	31	0.3	7	0.3	0	0.0	0	0.0	0	0.0
C-Section (Total)*	3,124	25.9	2,500	26.5	521	23.1	61	28.4	35	23.6	4	33.3
Primary C-section	1,851	15.3	1,496	15.9	289	12.8	35	16.3	26	17.6	3	25.0
Repeat C-section	1,260	10.4	992	10.5	231	10.3	26	12.1	9	6.1	1	8.3
C-section (unknown previous types)	13	0.1	12	0.1	1	0.0	0	0.0	0	0.0	0	0.0
Vacuum	927	7.7	775	8.2	125	5.6	8	3.7	14	9.5	1	8.3
Forceps	223	1.8	191	2.0	26	1.2	4	1.9	2	1.4	0	0.0

Note: For purposes of reporting methods of delivery, multiple births (twins, triplets, etc.) are counted only as a single birth.

\* According to the National Center for Health Statistics, vaginal and total C-section are comparable with past years.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 36, below, displays the method of delivery by fetal presentation. The majority of births, 96 percent, were cephalic; while

3.1 percent were breech. When looking at primary C-section births, 16.5 percent were breech while 80.8 percent were cephalic.

Table 36
South Dakota Resident Births by Method of Delivery and Fetal Presentation, 2007

	Total		Сер	halic	Br	eech	Other	
	Num	Percent	Num	Percent	Num	Percent	Num	Percent
Total	12,061	100	11,575	96.0	377	3.1	107	0.9
Vaginal (Total)*	8,937	100	8,886	99.4	17	0.2	34	0.4
Vaginal with no previous C-section	8,689	100	8,641	99.4	15	0.2	33	0.4
Vaginal after previous C-section	210	100	208	99.0	2	1.0	0	0.0
Vaginal (unknown previous types)	38	100	37	97.4	0	0.0	1	2.6
C-Section (Total)*	3,124	100	2,689	86.1	360	11.5	73	2.3
Primary C-section	1,851	100	1,496	80.8	305	16.5	49	2.6
Repeat C-section	1,260	100	1,188	94.3	55	4.4	16	1.3
C-section (unknown previous types)	13	100	5	38.5	0	0.0	8	61.5

Note: Multiple births (twins, triplets, etc.) were counted as only one single birth.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 37, on the next page, shows South Dakota resident births delivered by C-section and whether labor was attempted. In over half, 51.8 percent, of primary

C-sections labor was attempted. However, in 47.1 percent of primary C-sections labor was not attempted.

Table 37
South Dakota Resident Births Delivered by C-Section and Whether Labor was Attempted, 2007

	T	otal	7	7es	No		
	Num	Percent	Num	Percent	Num	Percent	
C-Section (Total)	3,124	100	1,022	32.7	2,081	66.6	
Primary C-section	1,851	100	958	51.8	872	47.1	
Repeat C-section	1,260	100	62	4.9	1,198	95.1	
C-section (unknown previous types)	13	100	2	15.4	11	84.6	

Note: Multiple births (twins, triplets, etc.) were counted as only one single birth. Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

#### Abnormal Conditions of the Newborn

Table 38, below, shows abnormal conditions in newborns in 2007. In 2007, 11.4 percent of South Dakota resident live birth certificates reported abnormal conditions of the newborn. Racially, abnormal conditions were reported for 11.3 percent of white

infants while they were reported for 12.3 percent of American Indian infants. Overall, NICU admission was the most frequently reported condition in 2007 followed by antibiotics received by the newborn for suspected neonatal sepsis.

Table 38
South Dakota Resident Live Births by Abnormal Conditions of Newborn by Mother's Race, 2007

						]	Race of 1	Mother				
	Tot	Total		White		American Indian		ck	Asian		Oth	ner
	Num	%	Num	<b>%</b>	Num	<b>%</b>	Num	<b>%</b>	Num	<b>%</b>	Num	%
NICU admission	1,106	9.1	865	9.1	209	9.1	16	7.3	12	8.1	3	25.0
Antibiotics received by the newborn for suspected neonatal sepsis	657	5.4	498	5.2	142	6.2	6	2.7	9	6.1	1	8.3
Assisted ventilation required immediately following delivery	552	4.5	416	4.4	120	5.3	7	3.2	6	4.1	2	16.7
Assisted ventilation required for more than six hours	331	2.7	257	2.7	65	2.8	3	1.4	5	3.4	0	0.0
Newborn given surfactant replacement therapy	88	0.7	73	0.8	13	0.6	2	0.9	0	0.0	0	0.0
Significant birth injury	19	0.2	17	0.2	2	0.1	0	0.0	0	0.0	0	0.0
Seizure or serious neurologic dysfunction	13	0.1	10	0.1	2	0.1	0	0.0	0	0.0	0	0.0
None of the above	10,791	88.6	8,433	88.7	2,004	87.7	197	90.0	134	90.5	8	66.7

Note: For purposes of reporting abnormal conditions of newborn, multiple births (twins, triplets, etc.) are counted only as a single birth.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

## **Congenital Anomalies**

Congenital anomalies reported in 2007 are shown in Table 39, on the next page. The total number of infants with at least one anomaly in 2007 was 106 or a rate of 8.7

per 1,000 live births. The most frequently reported anomaly in 2007 was chromosomal disorder with 26 or a rate or 2.1 per 1,000 live births.

Table 39
South Dakota Resident Births with Reported Congenital Anomalies, by Infant's Gender, 2007

		Gender				
	Tota	ıl	Fema	ıle	Mal	e
	Number	Rate	Number	Rate	Number	Rate
Chromosomal disorder	26	2.1	12	2.0	14	2.2
Cleft lip with or without a cleft palate	24	2.0	8	1.3	16	2.5
Cleft palate alone	13	1.1	4	0.7	9	1.4
Cyanotic congenital heart disease	13	1.1	5	0.8	8	1.3
Down syndrome (trisomy 21)*	13	1.1	5	0.8	7	1.1
Other craniofacial abnormality	12	1.0	4	0.7	8	1.3
Gastroschisis	9	0.7	5	0.8	4	0.6
Hypospadias	8	0.7	0	0.0	8	1.3
Meningomyelocele/Spina bifida*	4	0.3	2	0.3	2	0.3
Omphalacele	3	0.2	2	0.3	1	0.2
Congenital diaphragmatic hernia	2	0.2	2	0.3	0	0.0
Anencephaly*	1	0.1	0	0.0	1	0.2
Limb reduction defect	1	0.1	0	0.0	1	0.2
None of the above	12,076	985.6	5,876	988.6	6,200	982.9

Note: Rates are per 1,000 live births from 2007.

Failure of births to add to the total is due to unknown gender.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 35, below, displays congenital anomalies in 2007 by mother's race. Babies born to white mothers showed the highest congenital anomalies with chromosomal

disorder while babies born to American Indian mothers showed the highest anomalies with cleft lip with or without a cleft palate.

Table 40
South Dakota Resident Births with Reported Congenital Anomalies by Mother's Race, 2007

			Race of Mother										
	Tot	al	Wh	ite	Amer Indi		Black		Asian		Other		
	Num	<b>%</b>	Num	<b>%</b>	Num	%	Num	<b>%</b>	Num	%	Num	%	
Chromosomal disorder	26	0.2	21	0.2	4	0.2	1	0.5	0	0.0	0	0.0	
Cleft lip with or without a cleft palate	24	0.2	17	0.2	7	0.3	0	0.0	0	0.0	0	0.0	
Cleft palate alone	13	0.1	8	0.1	5	0.2	0	0.0	0	0.0	0	0.0	
Cyanotic congenital heart disease	13	0.1	12	0.1	1	0.0	0	0.0	0	0.0	0	0.0	
Down syndrome (trisomy 21)*	13	0.1	11	0.1	1	0.0	1	0.5	0	0.0	0	0.0	
Other craniofacial abnormality	12	0.1	8	0.1	4	0.2	0	0.0	0	0.0	0	0.0	
Gastroschisis	9	0.1	6	0.1	3	0.1	0	0.0	0	0.0	0	0.0	
Hypospadias	8	0.1	8	0.1	0	0.0	0	0.0	0	0.0	0	0.0	
Meningomyelocele/Spina bifida*	4	0.0	4	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Omphalacele	3	0.0	3	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Congenital diaphragmatic hernia	2	0.0	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Anencephaly*	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Limb reduction defect	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
None of the above	12,076	99.1	9,416	99.1	2,267	99.2	217	99.1	148	100.0	12	100.0	

Note: For purposes of reporting congenital anomalies of the mother, multiple births (twins, triplets, etc.) are counted only as a single birth.

<sup>\*</sup> According to the National Center for Health Statistics, down syndrome, meningomyelocele/spina bifida, and anencephaly are comparable with past years.

<sup>\*</sup> According to the National Center for Health Statistics, down syndrome, meningomyelocele/spina bifida, and anencephaly are comparable with past years.

